# **Section 858—Miscellaneous Metals**

## 858.1 General Description

This section includes the requirements for miscellaneous metals, such as lead for plates, pipes, and other uses, and miscellaneous bridge hardware.

### 858.1.01 Related References

#### A. Standard Specifications

General Provisions 101 through 150.

#### **B.** Referenced Documents

ASTM A 123/ A 123M

ASTM A 153/ A 153M

ASTM B 29

ASTM F 568M

## 858.2 Materials

## 858.2.01 Lead for Plates, Pipe, and Other Uses

#### A. Requirements

- 1. Use lead for plates, sheet, pipe, and other uses that meets the requirements of ASTM B 29, pig lead.
- 2. Use common, desilverized lead.

#### **B.** Fabrication

General Provisions 101 through 150.

## C. Acceptance

General Provisions 101 through 150.

#### D. Materials Warranty

General Provisions 101 through 150.

## 858.2.02 Miscellaneous Bridge Hardware

### A. Requirements

For miscellaneous hardware, use the design, size, and kind shown on the Plans or as directed by the Engineer.

#### 1. Bolts and Dowels

Use machine bolts, drift bolts, and dowels that meet the requirements of ASTM F 568M, Class 4.6. Ensure that machine bolts have square heads and nuts and that the screw threads fit closely.

## 2. Nails and Spikes

Use steel wire nails and circular, cross-section spikes without taper.

Use steel boat spikes with forged heads and wedge-shaped shanks and points.

## **B.** Fabrication

Galvanize hardware according to ASTM A 123/ A 123M or ASTM A 153/ A 153M, as applicable if the Plans specify galvanized hardware.

## C. Acceptance

General Provisions 101 through 150.

#### D. Materials Warranty

General Provisions 101 through 150.